

Health Risks in the United States

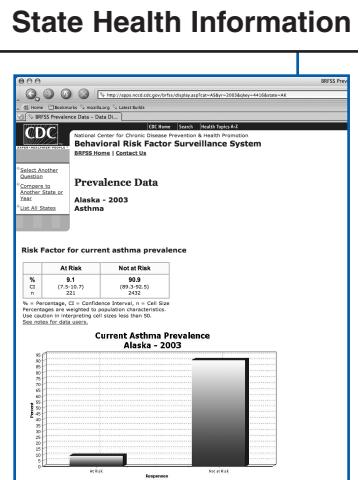
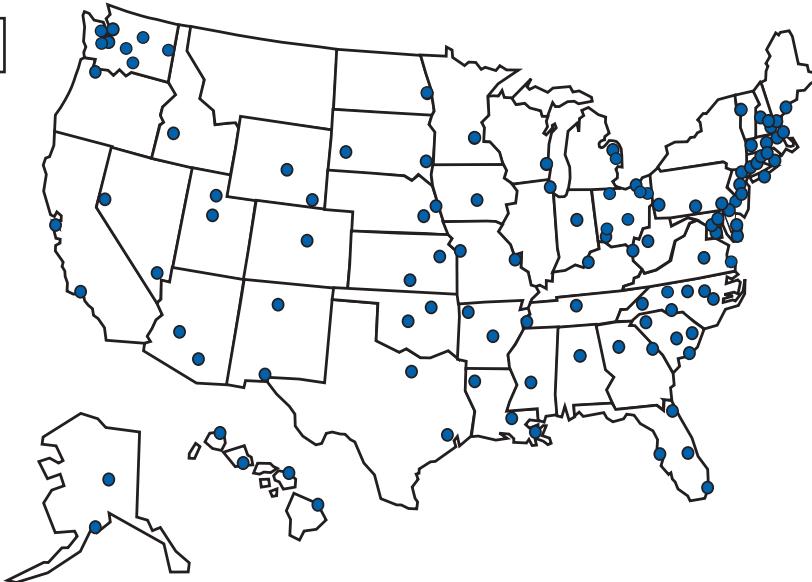
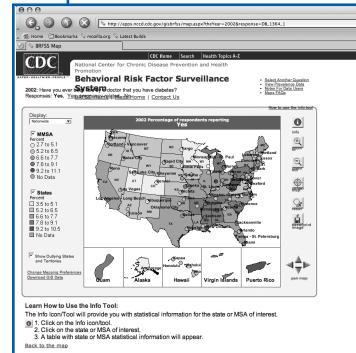
Behavioral Risk Factor Surveillance System

2005

New Tools for the Nation

SMART* BRFSS Local Health Information

Interactive Maps



* Selected Metropolitan/Micropolitan Area Risk Trends.

"It is essential to have local, as well as state, health risk behavior data. The SMART BRFSS raises awareness in the community, provides local data to decision makers, and helps target scarce resources."

Alonzo Plough, PhD, MPH
Director and Health Officer, Public Health—Seattle & King County
Metro Forum Chair, National Association of County and City Health Officials

Measuring Health Risks Among Adults

For more than 20 years, CDC's Behavioral Risk Factor Surveillance System (BRFSS) has helped states survey U.S. adults to gather information about a wide range of behaviors that affect their health. The primary focus of these surveys has been on behaviors that are linked with the leading causes of death—heart disease, cancer, stroke, diabetes, and injury—and other important health issues.

These behaviors include

- Not getting enough physical activity.
- Being overweight.
- Not using seatbelts.
- Using tobacco and alcohol.
- Not getting preventive medical care, such as flu shots, mammograms, Pap smears, and colorectal cancer screening tests, that can save lives.

"The BRFSS provides states with behavioral data to make critical decisions for public health programs."

*Donna Nichols, MSED, CHES
Senior Prevention Policy Analyst, Texas Department of Health*

Through the BRFSS surveys, CDC and the states have learned much about these and other harmful behaviors. This information is essential for planning, conducting, and evaluating public health programs at the national, state, and local levels. Private organizations also rely on the survey data to develop health promotion programs to reduce the prevalence of unhealthy behaviors and to document the effectiveness of these programs.

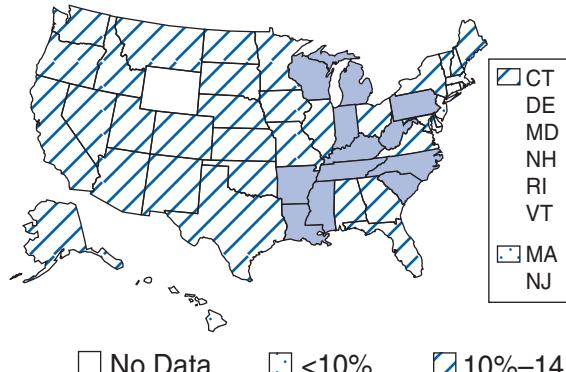
CDC's Unique State-Based Surveillance System

The BRFSS is a telephone survey conducted by the health departments of all states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam with assistance from CDC. Congress appropriated \$7.6 million for this system in fiscal year 2005. The BRFSS is the largest continuously conducted telephone health surveillance system in the world. States use BRFSS data to identify emerging health problems, to establish health objectives and track their progress toward

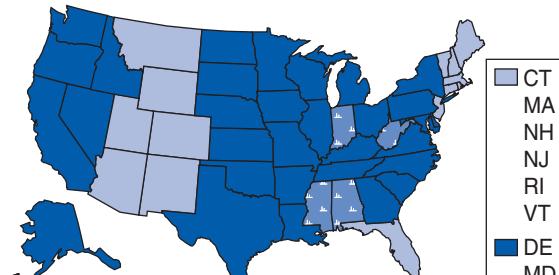
meeting them, and to develop and evaluate public health policies and programs to address identified problems. The BRFSS is the primary source of information for states and the nation on the health-related behaviors of adults. States collect data through monthly telephone interviews with adults aged 18 years or older. BRFSS interviewers ask questions related to behaviors that are associated with preventable chronic diseases, injuries, and infectious diseases.

Obesity* Trends Among U.S. Adults

1993



2003



* Body mass index ≥ 30 , or about 30 lbs. overweight for a 5'4" person.

Source: CDC, Behavioral Risk Factor Surveillance System.

CDC works with states to ensure the success of the BRFSS. For example, CDC public health advisors provide states with technical assistance, and CDC epidemiologists offer assistance with survey methodology and data analysis. To ensure that the BRFSS data are of high quality, CDC generates a household calling list for each state, processes survey data, produces monthly and annual quality assurance reports, and provides online training for state-based BRFSS coordinators and interviewers. CDC also helps states develop resources to analyze, interpret, and use their survey data. State and local health departments rely on data from the BRFSS to

- Determine high-priority health issues and identify populations at highest risk for illness, disability, and death by analyzing data according to respondents' age, sex, education, income, and race/ethnicity.
- Develop strategic plans and targeted prevention programs.

- Examine trends in behaviors over time to monitor the effectiveness of public health programs and progress in meeting prevention goals.
- Support community policies and programs that promote health and prevent disease—for example, by educating the public, the health community, and policy makers about disease prevention.

Researchers, professional organizations, managed care organizations, and community-based organizations use BRFSS data to develop targeted prevention activities and programs. In addition, public health professionals use the data to monitor the progress of the nation, states, and local areas toward meeting the health objectives in *Healthy People 2010*. Moreover, Canada, Australia, Russia, and several other countries, recognizing the value of the BRFSS, have asked CDC to help them establish similar surveillance systems.

Versatility of the BRFSS

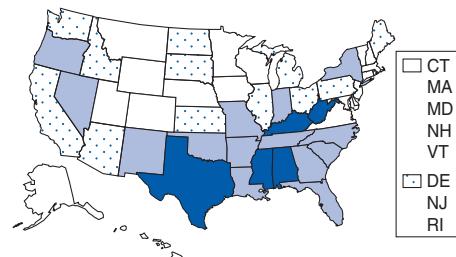
The BRFSS is flexible because it allows states to add timely questions specific to their needs. At the same time, standard core questions on the survey enable health professionals to make comparisons among states and local areas and also to reach national conclusions. BRFSS data have highlighted state-to-state differences in key health issues. In 2003, for example, the percentage of adults who did not exercise ranged from a low of 15% in Minnesota to a high of 30.6% in Kentucky.

BRFSS data also can be analyzed to examine smaller geographic areas within states. For example, CDC has analyzed BRFSS state data for a searchable Web site called SMART (Selected Metropolitan/Micropolitan Area Risk Trends) BRFSS. This project produced data for 98 metropolitan and micropolitan statistical areas (MMSAs) and showed that the prevalence of high-risk health behaviors varied substantially among selected MMSAs. In areas analyzed for 2002,

- The prevalence of fair or poor health ranged from 6.7% in the Bethesda-Frederick-Gaithersburg, MD, MMSA to 26.2% in the Huntington-Ashland, WV-KY-OH, MMSA.
- The prevalence of current smokers ranged from 13.8% in the Ogden-Clearfield, UT, MMSA to 32.8% in the Youngstown-Warren-Boardman, OH-PA, MMSA.
- Diabetes prevalence ranged from 2.7% in the Anchorage, AK, MMSA to 11.1% in the Charleston, WV, MMSA.

The BRFSS also can be used to address urgent and emerging health issues in a particular area. States can add questions on a wide range of important health issues, such as diabetes, arthritis, tobacco use, folic acid consumption, health care coverage, and even terrorism. For example, following the September 11, 2001, terrorist attack on the World Trade Center, three states—New York, New Jersey, and Connecticut—added questions to their BRFSS surveys to measure the psychological and emotional effects of this traumatic event.

Percentage of Adults Who Reported Fair or Poor Health



□ 10%–12.9% □ 13%–15.9% □ 16%–19.9% ■ ≥20%

Source: CDC, Behavioral Risk Factor Surveillance System, 2003.

BRFSS In Action

The Behavioral Risk Factor Surveillance System (BRFSS) is addressing the challenges presented by a growing demand for survey data. One such challenge is to keep phone interviews to a reasonable length while meeting these demands for additional data.

To meet these challenges, the BRFSS has increased the number of adults interviewed in each state from 2,000 to 4,000. This increase allows sites to provide local-level data and to use split sampling. With split sampling, different portions of the sample population answer different sets of BRFSS questions. As a result, sites are now able to collect BRFSS data on a wider range of topics each year.

With the addition of the SMART (Selected Metropolitan/Micropolitan Area Risk Trends) BRFSS, CDC is also able to provide data on health-specific risks for some communities. Another new resource is the BRFSS Maps interactive Web site, which graphically displays the prevalence of behavioral risk factors at state and MMSA levels. This tool will revolutionize the way people at local, state, and federal levels use BRFSS data.

Florida

The 2002 Florida BRFSS collected data from all 67 Florida counties. These county data are now part of Florida's Community Health Assessment Resource Tools Set (CHARTS), an interactive Web site that public health professionals and the public can use to create personalized reports from these and other data.

Williamson County, Texas

Officials with the Williamson County & Cities Health District (WCCHD) learned from the Texas BRFSS that 56% of their residents were not participating in any physical activity, 34% were overweight, and 21% were obese. These data prompted WCCHD officials to look for ways to help people become more physically active. For example, officials published a map for bikers that features local roads, hiking and cycling trails, a roadway rating system, and safety tips. They also developed a Web site that allows bikers to create customized maps.

Obesity Epidemic

In 1993, no state had an obesity prevalence of more than 20%. By 2003, 31 states reported that 20%–24% of their residents were obese, and in 4 states, over 25% of the population was obese. BRFSS trend data allowed health officials to quickly detect this growing epidemic and identify which areas of the country were most affected.

Mammograms

In 1990, BRFSS data indicated that, nationwide, 35.3% of women over the age of 40 had never had a mammogram. At the time, only 17 states had laws requiring mandatory insurance payment for mammograms. Using BRFSS data, several states were able to enact similar laws. By 2002, 49 states and the District of Columbia required insurance coverage, and the percentage of women over the age of 40 who had never had a mammogram had dropped to 15.9%. BRFSS data helped guide a powerful shift in state policies.

Future Directions

States and urban areas will continue to rely on the BRFSS to gather the high-quality data they need to plan and evaluate public health programs and to allocate scarce resources. CDC will work closely with state and federal partners to ensure that the BRFSS continues to provide data that are useful for public health research and practice and for state and local health policy decisions.

As telecommunication technology evolves, CDC is exploring the use of multiple methods to collect BRFSS data. These include sending a letter of notification before the phone interview and conducting surveys by mail or on the Internet. In addition, CDC is working to make the BRFSS more representative by exploring new ways to reach hard-to-find populations.

New tools also are being developed. CDC is experimenting with conducting follow-up studies of particular subpopulations identified by the BRFSS, such as people diagnosed with asthma. CDC also is developing a Web-based application that will allow users who are not familiar with statistical software to perform statistical analyses of BRFSS data.

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